

EXHIBIT 9

Unit Converter**Unit Converter****Convert from:**

Field:

viscosity (dynamic)

Unit:

mPa s

Value:

150 mPa s

Convert to:

Significant Digits:

4

Unit:

cP

Value:

150.0 cP

Click the Convert button below to display the value.

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Dynamic or Absolute Viscosity Converting Chart

An absolute or dynamic viscosity converting chart for units like Poiseuille - Poise - centipoise and more

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The viscosity of a fluid is an important property in the analysis of liquid behavior and fluid motion near solid boundaries.

The viscosity of a fluid is its resistance to shear or flow and is a measure of the adhesive/cohesive or frictional properties of a fluid. The resistance is caused by intermolecular friction exerted when layers of fluids attempts to slide by an other.

A Dynamic or Absolute Viscosity Units Converting Table

The table below can be used to convert between common dynamic or absolute viscosity units.

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Multiply by	Convert to					
Convert from	Poiseuille (Pa s)	Poise (dyne s / cm ²)	Poise = g / cm s	centipoise	kg / m h	kg f s / m ²
Poiseuille (Pa s)	1	10	10 ³	10 ³	3.63 10 ³	0.102
Poise (dynes/cm ²)	0.1	1	1	100	360	0.0102
= g / cm s						
Poise kg / m h	0.001	0.01	1	1	3.6	0.00012
centipoise	2.78 10 ⁻⁴	0.00278	0.0278	0.0278	1	2.83 10 ⁻⁵
kg f s / m ²	9.81	98.1	9.81 10 ³	9.81 10 ³	3.53 10 ⁴	1
lb f s / inch ²	6.89 10 ³	6.89 10 ⁴	6.89 10 ⁶	6.89 10 ⁶	2.48 10 ⁷	7.03
lb f s / ft ²	47.9	479	4.79 10 ⁴	4.79 10 ⁴	1.72 10 ⁵	0.0488
lb f h / ft ²	1.72 10 ⁵	1.72 10 ⁶	1.72 10 ⁸	1.72 10 ⁸	6.21 10 ⁸	1.76 10 ⁴

Multiply by	1.49	14.9	1.49 10 ³	5.36 10 ³	0.152
Convert from	lb _f s / inch ²	lb _f s / ft ²	lb _f h / ft ²	lb / ft s	lb / ft h
Poiseuille Poise	1.45 10 ⁻⁴	0.0209	5.8 10 ⁻⁶	0.672	2.42 10 ³
(dyne s / cm ²) = g / (cm s)	1.45 10 ⁻⁵	0.00209	5.8 10 ⁻⁷	0.0672	242
centipoise	1.45 10 ⁻⁷	2.9 10 ⁻⁵	5.8 10 ⁻⁹	0.000672	2.42
kg / m h	4.03 10 ⁻⁸	5.8 10 ⁻⁶	1.61 10 ⁻⁹	0.000187	0.672
kg _f s / m ²	0.00142	20.5	5.69 10 ⁻⁵	6.59	2.37 10 ⁴
lb _f s / inch ²	1	144	0.04	4.63 10 ³	1.67 10 ⁷
lb _f s / ft ²	0.00694	1	0.000278	32.2	1.16 10 ⁵
lb _f h / ft ²	25	3.6 10 ³	1	1.16 10 ⁵	4.17 10 ⁸
lb / ft s	0.000216	0.0311	8.63 10 ⁻⁶	1	3.6 10 ³
lb / ft h	6 10 ⁻⁸	1.16 10 ⁵	2.4 10 ⁻⁹	0.000278	1

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- **Fluid Flowmeters** Flow metering basics. Introduction to Orifice, Venturi, Flow Nozzles, Pitot Tubes, Target, Variable Area, Positive Displacement, Turbine, Vortex, Electromagnetic, Ultrasonic Doppler, Ultrasonic Time-of-travel, Mass Coriolis, Mass Thermal, Weir V-notch, Flume Parshall and Sluice Gate flow meters.

Related Documents

- Dynamic, Absolute, and Kinematic Viscosity An introduction to dynamic, absolute and kinematic viscosity and how to convert between CentiStokes (cSt), Centipoises (cp), Saybolt Universal Seconds (SSU), degree Engler and more.

- Viscosity Converting Chart A converting table between viscosity units as Centipoises, milliPascal, CentiStokes and SSU
- [Online Absolute or Dynamic Viscosity Converter](#) Convert between dynamic or absolute viscosity units - Poiseuille, Poise, centPoise and more

- [Piping system design](#) Fluid flow software to calculate pressure drop, flow rate & temp
- [Process & Lab Viscometers](#) Cambridge Applied Systems is a leading manufacturer, contact us for catalogs
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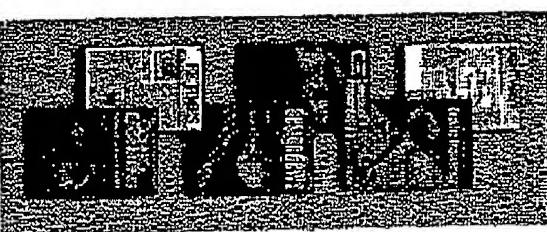


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°C
 °F

Length
 m
 km
 in
 ft
 yards
 miles
 nautical miles

Volume
 m³
 liters
 in³
 ft³
 us gal

Velocity
 m/s
 km/h
 ft/min
 ft/s
 mph
 knots

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- bar
 - mm H₂O
 - kg/cm²
 - psi
 - inches H₂O
- 
-
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Flow
1

Q
 m^3/s

Q
 m^3/h

Q
US gpm

Q
dm

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